

REMARKS

Claim 1 has been amended to eliminate the Jepson format and to better define the acoustic projector as shown in Fig. 3, comprising an outer shell 8 which is formed of a composite/epoxy material and having an inner concentric acoustic driver 10 and an inner concentric insulative layer 24 and a metallic liner 20 located between the outer shell 8 and insulative layer 24, and further including a longitudinal slot 14 formed in the outer shell, metallic liner and driver.

The Office Action rejected claims 1-6 under 35 USC 103(a) as being unpatentable over Kompanek ('448) alone or in view of Walden et al. ('333) or Upton ('202). The Office Action seems to suggest that in view of Walden and Upton, it would have been obvious to modify Kompanek by substituting an epoxy or graphite shell for the aluminum or steel shell of Kompanek. If this was accomplished, it would defeat the very purpose of Applicant's invention as now defined in claim 1, namely, that the acoustic projector has an outer shell formed of a graphite/epoxy material and a metallic liner 20 located between the outer epoxy shell and driver. It is desirable to maintain the outer shell of the epoxy resin in combination with the interior reinforcing liner formed of metal which is separated from the driver by an insulation layer. The metallic liner is not a substitute for the graphite/epoxy outer shell but is used in combination with the outer shell. As discussed in the Summary of the Invention, the metallic liner provides increased stiffness in the Z-axial direction (along the axial length of the projector) which reduces stress, which is not satisfactorily achieved by the outer shell of graphite/epoxy material alone.

Thus, modifying Kompanek by substituting an epoxy or graphite shell for the aluminum shell of Kompanek provides a completely different structure than that of Applicant's invention. Thus, it is respectfully requested that there is a patentable distinction between what Applicant claims now in claim 1, that is, an acoustic projector having an outer shell of graphite/epoxy material and a metallic liner separated from the driver by an insulation layer. It is the combination of the inner driver and metallic liner separated by the insulative layer together with the outer shell of graphite/epoxy material which achieves the desired advantages

which would not be achieved by merely replacing the metallic liner of Kompanek with the graphite/epoxy outer shell of Walden or Upton. Furthermore, there is absolutely no suggestion in either of these three references of combining the teachings thereof to form the particular structural combination now set forth in amended claim 1 since none of these references are attempting to achieve what applicant is achieving by the particular combination set forth in claim 1. Accordingly, it is submitted that claim 1 patentably defines over the Kompanek reference individually and if combined with Walden or Upton.

Claim 4 has been amended to depend from amended claim 1 and furthermore specifies that the metallic liner 26 as shown in Fig. 4, is tapered and increases in radial thickness towards the location diametrically opposite the longitudinal slot as clearly shown in Fig. 4 and indicated at numeral 28. Since none of the three cited references disclose the use of a metallic liner in combination with an outer shell of a graphite/epoxy material, much less one having a metal liner having such a construction as set forth in claim 4, clearly and patentably defines over the cited references.

Remaining dependent claim 6-10 and 21 define additional features and elements of claim 1 from which they depend and are believed to be allowable along with claim 1.

The allowance of claims 11-17 is noted and appreciated.

It is respectfully requested that should the Examiner have any further questions or comments regarding the claims as now presented, that he phone the undersigned with the anticipation that a solution can be reached to place the application in condition for allowance.

Respectfully submitted this 18TH day of June, 2009.

SAND & SEBOLT

A handwritten signature in cursive script that reads "Michael Sand".

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